

Claims

- [1] A dust separator of a cyclone type cleaner comprising:
a first dust separator connected to a suction pipe, for separating dust from air by a centrifugal force for the first time;
a collecting container connected to a lower portion of the first dust separator and in which the dust separated in the first dust separator is collected; and
a second dust separator connected to an upper portion of the first dust separator, for sucking air passed through the first dust separator and for separating dust from the air by a centrifugal force for the second time.
- [2] The dust separator of claim 1, wherein the first dust separator is formed as a hopper of which an inner diameter become narrower toward a lower portion of the hopper and an upper portion of the first dust separator is connected to a connection pipe.
- [3] The dust separator of claim 1, wherein the second dust separator comprises:
a dust separating container connected to the first dust separator by a connection pipe;
an impeller rotatably disposed inside the dust separating container, for forcedly rotating the air sucked therein through the connection pipe; and
a circulation pipe connected to an outer side of the dust separating container, for re-sucking the dust separated in the dust separating container into the first separator.
- [4] The dust separator of claim 3, wherein the dust separating container is formed in a cylindrical shape having an whirl generating space, and the outer side of the dust separating container connected to a circulation pipe and the upper portion of the dust separating container connected to an air discharge pipe for discharging filtered air from which the dust is separated.
- [5] The dust separator of claim 3, wherein the impeller is connected to a driving motor for being rotated by the driving motor.
- [6] The dust separator of claim 3, wherein one side of the circulation pipe is connected to the outer side of the dust separating container and another side thereof is connected to the suction pipe so that the dust separated in the dust separating container is re-sucked into the first dust separator through the suction pipe.
- [7] The dust separator of claim 3, wherein a first electric discharge pole for

electrically charging dust in air exhausted from the first dust separator is installed in the connection pipe, and a second electric discharge pole installed in the dust separating container for applying a repulsive force to dust particles is electrically charged while passing through the first electric discharge pole so that the dust particles is moved toward an inner side wall of the dust separating container.